REMARKS

Claims 11 and 17 are pending in the application. Claims 54-64 are added. Support for newly added claims 54-64 can be found on page 28 of the specification. Upon entry of this amendment, claims 11, 17, and 54-64 will be pending.

Rejection of Claims 11 and 17 Under 35 U.S.C. §112, First Paragraph

The Office Action states that claims 11 and 17 are rejected for lack of written description. The Office Action states that the claims encompass an "infinite number" of two chain polypeptides that are not sufficiently described in the specification, and that the claims include an "enormous number of structural variants." The Office Action states that the disclosure of making arrays of V_H/V_L two-chain polypeptides is not a representative number of species to support claims to the broad genus of two-chain polypeptides. Applicants respectfully disagree and traverse the rejection.

The current claims are drawn to a novel and non-obvious method for producing a combinatorial library of two or three-chain polypeptides. Applicants are not claiming the polypeptide molecules per se, but a method of arranging polypeptides to form two or three polypeptide chains. As originally claimed, the invention is useful with a combination of polypeptide chains. Polypeptide chains are well known in the art, and the law is clear that Applicants need not disclose what is already well known in the art. (See, e.g., *In re Buchner*, 929 F.2d 660, 661, 18 USPQ2d 1331, 1332 (Fed. Cir. 1991); *Hybritech, Inc. v. Monoclonal Antibodies, Inc.*, 802 F.2d 1367, 1384, 231 USPQ 81, 94 (Fed. Cir. 1986), *cert. denied*, 480 U.S. 947 (1987); and *Lindemann Maschinenfabrik GMBH v. American Hoist & Derrick Co.*, 730 F.2d 1452, 1463, 221 USPQ 481, 489 (Fed. Cir. 1984)). The identity of the individual members of the first and second (and/or third) repertoires is largely irrelevant because the focus of the invention is the method of creating interactions between the members of the repertoires. The claimed method does not require a specific interaction between members of the repertoires that would be influenced by considerations such as secondary structure (a concern raised in the Office Action), but instead relates to a method for generating, at the point of intersection of the lines of the first, second, and third repertoires, a two or three chain polypeptide. As such, the

example provided in the specification of producing a V_H/V_L combinatorial library is representative of the genus, in that one of skill in the art could merely substitute the V_H/V_L polypeptide chains with another known polypeptide chain to create the library. The Office Action states that the "specification and claims do not provide any guidance as to what changes should be made to extend the instant specification on example to the infinite number of possibilities that are currently being claimed." Applicants respectfully disagree. The claims recite a method for generating a library of two- or three-chain polypeptides. The only change needed to practice the invention using a repertoire of single chain polypeptides is to place a first and second repertoire of a single-chain polypeptide on the array as claimed. Applicants are not claiming the repertoire of polypeptides, but a method of arraying polypeptides on a solid surface. One of skill in the art would readily appreciate that the claimed method could be practiced using a repertoire of single-chain polypeptides, regardless of their specific structure.

New claims have been added that specify that the members of the repertoires can be immunoglobulin polypeptides, including antibody polypeptides. The specification teaches that an "antibody polypeptide" includes "a heavy chain, a light chain, a heavy chain-light chain dimer, a Fab fragment, a $F(ab')_2$ fragment, a dAb fragment, a light or heavy chain single domain, and an Fv fragment, including a single chain Fv (scFv), linked single domains such as V_H-V_H or V_L-V_L, or a di-sulphide bonded Fv (dsFv)," all of which are known to those of skill in the art. The method of the invention can be used with a polypeptide such as the antibody polypeptides taught in the specification and antibody polypeptides known to those of skill in the art. Antigens and antibody polypeptides, as recited in the newly added claims, were well known at the time the instant application was filed, and Applicants need not teach what is already well known. Again, the claims are directed at a method of creating combinations of polypeptides, and are not focused on the identity of the polypeptides themselves. Thus, there is no reason that one of skill in the art would doubt that Applicants were in possession of the claimed invention as of the filing date. Moreover, the Examiner has not provided any evidence as to why one of skill in the art would not believe that Applicants were in possession of a method of arraying polypeptides on a solid surface.

The Office Action states that the disclosure of a representative number of examples provide[s] reasonable assurance to one skilled in the art that the compounds falling within the scope [of the claims] both possess the alleged utility and additionally demonstrate that applicant had possession of the full scope of the claimed invention." Applicants are not claiming the members of the repertoires. The utility of the invention lies in the claimed method for producing a library of two- or three-chain polypeptides. Thus, a polypeptide repertoire, when used in the method of the invention, will possess the alleged utility. Applicants have demonstrated possession of the full scope of the claimed method; that is, Applicants have provided sufficient description of a method for arraying polypeptides to demonstrate to one of skill in the art that they were in possession of the claimed invention.

Accordingly, Applicants request that the written description rejection be reconsidered and withdrawn.

Applicant submits that all claims are allowable as written and respectfully request early favorable action by the Examiner. If the Examiner believes that a telephone conversation with Applicant's attorney/agent would expedite prosecution of this application, the Examiner is cordially invited to call the undersigned attorney/agent of record.

Respectfully submitted,

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